



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

JAMES H. TROGDON, III  
SECRETARY

May 16, 2019

MEMORANDUM TO: Shane York, PE  
NCDOT Feasibility Studies Unit

FROM: Paul S. Schroeder, PhD PE  
Traffic Forecasting Group  
Transportation Planning Division

SUBJECT: Traffic Forecast for H184360  
Mecklenburg County  
NC 16 (Providence Road) Intersection Improvements

Please find attached the 2019/2045 traffic forecast for H184360 in Mecklenburg County. The project is in the City of Charlotte, and concerns improvements to the NC 16 (Providence Road) intersections with Fairview Road/Sardis Road, Sharon Lane/Sharon Amity Road and S. Westover Road.

Project U-6150 is not listed in the April 2019 NCDOT STIP. The project is not included in the Charlotte Regional TPO (CRTPO) 2045 Metropolitan Transportation Plan (MTP), adopted March 18, 2018.

This is the first forecast for H184360.

The following scenarios are provided:

- 2019 No Build Estimate
- 2045 No Build Forecast

For both Base Year 2019 and Future Year 2045, a No Build forecast is provided. The intersection improvements along NC 16 (Providence Road) have not been determined.

**Certain Assumptions were made during the development of this forecast.**

**Fiscal Constraint:**

Within an MPO area, travel demand forecasts assume the construction of projects listed within an MPO's Metropolitan Transportation Plan (MTP). The 2045 forecast is consistent with the CRTPO current MTP.

**Development Activity:**

There are a couple of apartment complexes under re-development. The project area is essentially built out. For 2045, it is assumed that future population growth and commercial development trends are reasonably estimated by the SE data used in the Metrolina Regional Model (MRM), Version 18v1.1.

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**Forecast Methodology:**

The 2019 estimates are based upon 2019 traffic counts and historic AADT trends.

The 2045 forecast was developed based upon travel demand predictions of the Metrolina Regional Model (MRM), Version 18v1.1 adopted December 3, 2018.

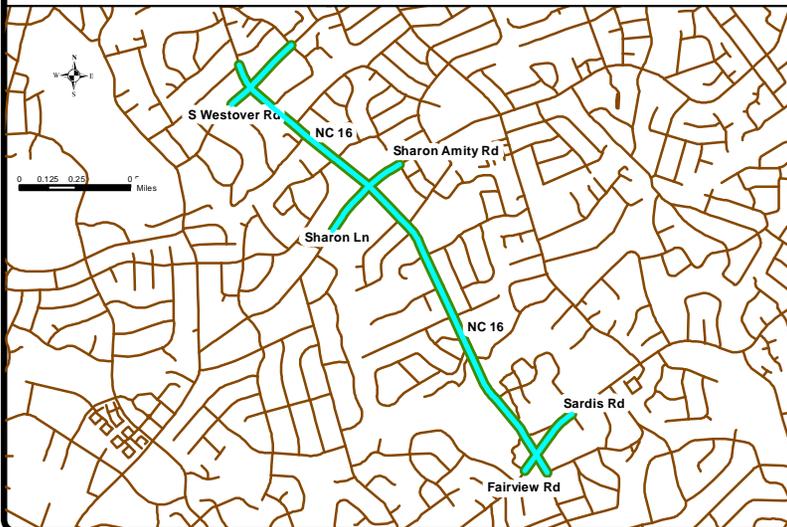
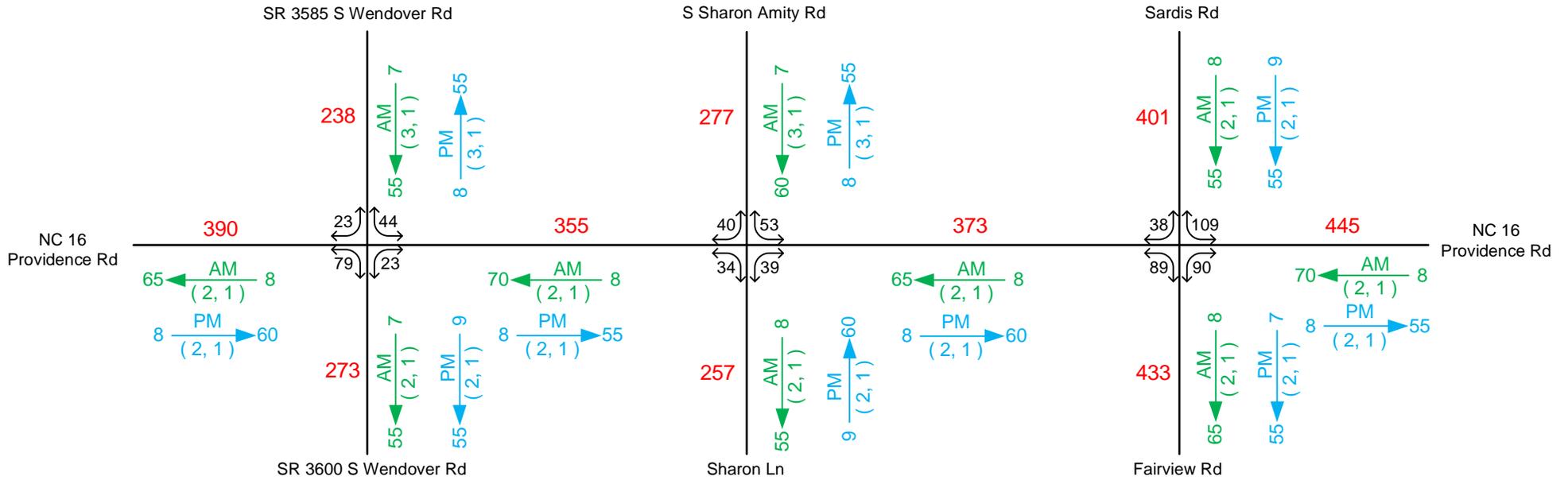
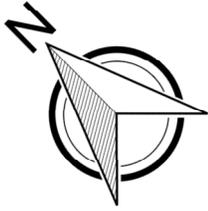
The use of straight-line interpolation to estimate AADT for years between 2018 and 2045 is acceptable.

If it is determined that any of these assumptions have become inconsistent with the project and surrounding area activity, please request an updated forecast.

If we can be of any further assistance please do not hesitate to contact me at 919-707-0983, email: pschroeder@ncdot.gov or Michael Orr at 919-707-0982, email: mlorr@ncdot.gov.

cc (with Attachments):

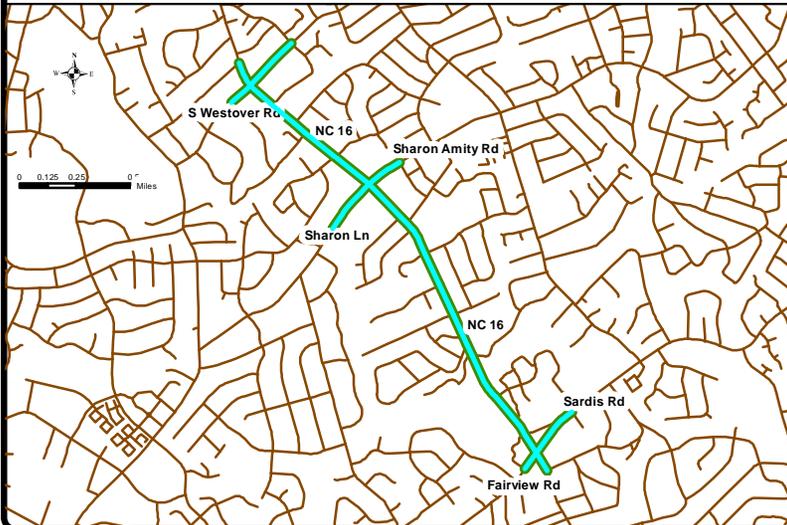
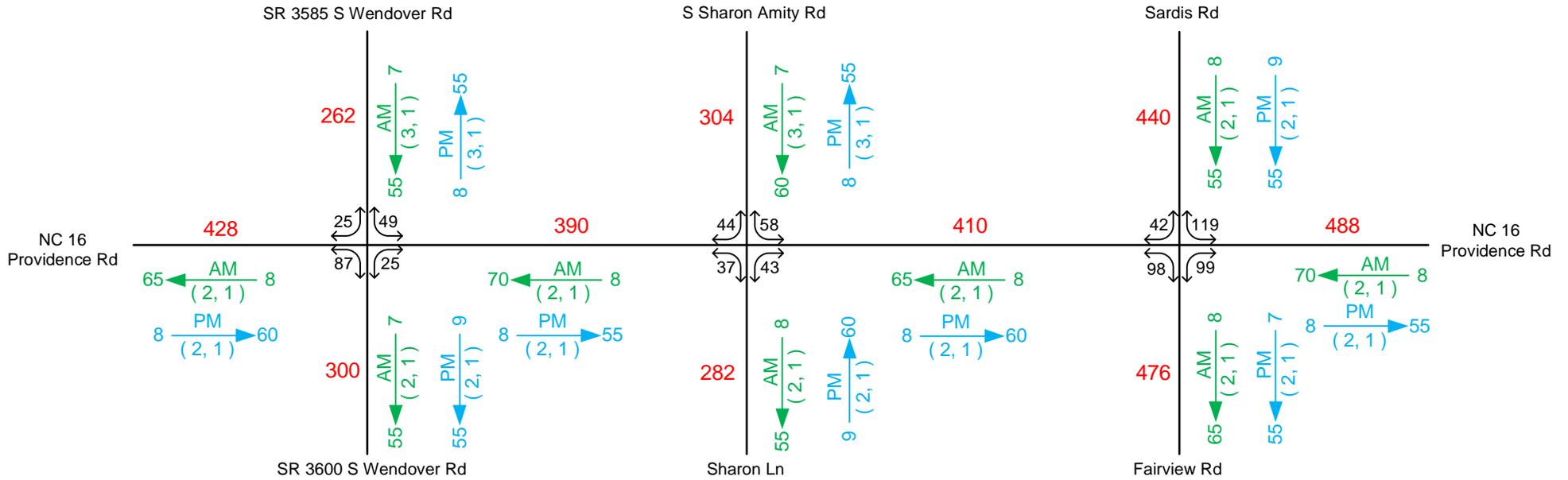
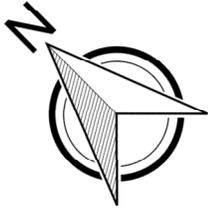
Brenda Moore, PE, Highway Design Branch  
Andy Bailey, Transportation Planning Division  
Keith Dixon, Transportation Planning Division  
Michael Reese, PE, Congestion Management Section  
Clark Morrison, PhD PE, Pavement Management  
Traffic Forecasting GIS Support



### LEGEND

- ### No. of Vehicles Per Day in 100s
- 1- Less than 50 vpd
- X Movement Prohibited
- $K \frac{?M}{(d,t)} \rightarrow D$
- K Design Hour Factor (%)
- AM AM Peak Period
- PM PM Peak Period
- D Peak Hour Directional Split (%)
- Indicates Direction of D
- (d, t) Duals, TT-STs (%)

<b>2019 No Build</b>		<b>ANNUAL AVERAGE DAILY TRAFFIC</b>	
<b>TIP:</b> H184360		<b>WBS:</b> 34263.1.1	
<b>COUNTY:</b> Mecklenburg		<b>DIVISION:</b> 10	
<b>DATE:</b> May 16, 2019			
<b>FORECASTER:</b> Paul Schroeder, PhD PE			
<b>LOCATION:</b> NC 16 (Providence Road)			
<b>Project:</b> NC 16 intersection improvements at Fairview Rd/Sardis Rd, Sharon Ln/S Sharon Amity Rd & S Wendover Rd			



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<b>2045 No Build</b>		<b>ANNUAL AVERAGE DAILY TRAFFIC</b>	
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